

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1-39. (Canceled)

40. (New) An endodontic instrument for removing material from a wall of a channel, the instrument comprising a flexible member having a longitudinal axis, the member being bendable along the axis and deformable in a direction perpendicular to the axis to conform to a channel having a non-uniform width.

41. (New) The endodontic instrument of claim 40, wherein the flexible member is a shape memory member.

42. (New) The endodontic instrument of claim 40, wherein the member further comprises a plurality of radially disposed elements, a cutting edge being disposed on the distal ends of the radially disposed elements.

43. (New) The endodontic instrument of claim 40, further comprising a cutting edge on at least a portion of an exterior surface of the member.

44. (New) The endodontic instrument of claim 40, further comprising on at least a portion of an exterior surface of the member at least one selected from a group consisting of an abrasive surface, a roughened surface, small teeth, and a cutting edge.

45. (New) The endodontic instrument of claim 44, wherein the member comprises a wall having an open lattice structure surrounding a hollow interior portion of the instrument.

46. (New) The endodontic instrument of claim 44, wherein the member has a hollow interior extending along the longitudinal axis through which fluid can flow.

47. The endodontic instrument of claim 44, wherein fluid can flow into the channel via a space between the wall of the channel and an outer surface of the endodontic instrument.

48. (New) The endodontic instrument of claim 44, wherein the member comprises at least one longitudinal element connected to a plurality of circumferential elements.
49. (New) The endodontic instrument of claim 48, wherein the circumferential elements are straight elements.
50. (New) The endodontic instrument of claim 48, wherein the longitudinal element is one selected from a group consisting of a straight element and a curved element, and wherein the circumferential elements are selected from a group consisting of straight elements and curved elements.
51. (New) The endodontic instrument of claim 44, wherein the instrument is made from one selected from a group consisting of a superelastic material, a material having shape memory properties, and a material treated to give the material shape memory properties.
52. (New) The endodontic instrument of claim 44, wherein the instrument is made from a nickel titanium alloy.
53. (New) A method of widening a root canal, the root canal having a non-uniform cross-section, the method comprising:
- inserting a flexible member into the root canal having the non-uniform cross-section;
  - moving the flexible member within the root canal; and
  - removing a substantially uniform layer of material from substantially all inner surfaces of the root canal by movement of the flexible member.
54. (New) The method of claim 53, wherein moving the flexible member comprises one selected from a group consisting of rotating, vibrating, and making translational movements of the flexible member within the root canal.
55. (New) The method of claim 53, wherein the flexible member comprises a cutting edge, and moving the flexible member comprises rotating the flexible member within the root canal to thereby remove the substantially uniform layer of material.

56. (New) The method of claim 53, wherein the flexible member comprises an abrasive exterior surface, and moving the flexible member comprises rotating the flexible member within the root canal to thereby remove the substantially uniform layer of material by abrasion.
57. (New) The method of claim 53, further comprising disposing an abrasive slurry in the channel between a root canal wall and an exterior surface of the flexible member such that movement of the flexible member within the root canal causes the slurry to abrade away the substantially uniform layer of material at the root canal wall.
58. (New) The method of claim 53, wherein the member comprises a longitudinal axis and moving the flexible member within the root canal comprises moving the flexible member along the direction of the longitudinal axis.
59. (New) The method of claim 53, further comprising irrigating the root canal while the flexible member is moving within the root canal.
60. (New) The method of claim 53, wherein the flexible member comprises a balloon.
61. (New) The method of claim 53, wherein the flexible member comprises a balloon having an abrasive outer surface.
62. (New) An endodontic instrument for widening a root canal, the instrument comprising a balloon with an abrasive exterior surface.
63. (New) An endodontic instrument for widening a root canal, the instrument comprising:  
a balloon having a longitudinal axis; and  
a rod disposed inside the balloon, oriented along the longitudinal axis and  
attached to a distal end of the balloon.
64. (New) The endodontic instrument for widening a root canal of claim 63, wherein the balloon has an abrasive outer surface.
65. (New) An endodontic instrument for widening a root canal, the instrument comprising:  
a balloon; and  
a plurality of flexible longitudinal members outside the balloon, such that an

expansion of the balloon pushes against the flexible longitudinal members.

66. (New) The endodontic instrument for widening a root canal of claim 65, wherein the plurality of flexible longitudinal members has a cutting edge.

67. (New) The endodontic instrument for widening a root canal of claim 65, wherein the plurality of flexible longitudinal members has an abrasive surface.

68. (New) A method of using an endodontic instrument for widening a root canal, the method comprising:

- inserting a balloon into the root canal;
- at least partially inflating the balloon; and
- moving the balloon within the root canal to widen the root canal.

69. (New) The method of claim 68, further comprising irrigating the root canal while moving the balloon within the root canal.

70. (New) The method of claim 68, further comprising disposing an abrasive slurry between an exterior surface of the balloon and the root canal.

71. (New) The method of claim 68, wherein the balloon has an abrasive exterior surface.

72. (New) A method of using an endodontic instrument for widening a root canal, the method comprising:

- inserting a first and second flexible longitudinal member into the root canal;
- rotating the first and second flexible longitudinal members within the root canal;
- and
- forcing the first flexible longitudinal member against a side of the root canal while simultaneously forcing the second flexible longitudinal member against an opposite side of the root canal.

73. (New) The method of claim 72, wherein the flexible longitudinal members have an abrasive surface.

74. (New) The method of claim 72, wherein the flexible longitudinal members have a

cutting edge.

75. (New) The method of claim 72, further comprising disposing an abrasive slurry between the sides of the root canal and the flexible longitudinal members.

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